

REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claims 1-31 have been cancelled in favor of new claims 32-39. Support for the new claims may be found in Figs. 10-12 and on pages 13 and 19-24 of the specification.

Claims 1, 6, 8, 9, 11, 21, and 31 were rejected under 35 USC §112, first paragraph. Although these rejections are obviated by the amendments contained herein, Applicant submits the following remarks regarding the lack of support for the TDMA uplinks and downlinks, as proposed in the Office Action.

As illustrated in Figs. 10-12 of the application and described in the accompanying portions of the specification, Applicant discloses periods of time that are indicated by the vertical running dashed lines of Figs. 10-12. These periods of time are divisions of the illustrated time continuum. As may be seen by examination of Fig. 12, one time frame 122 includes five divisions of time 121_1 - 121_5 . During these time divisions 121_1 - 121_5 , four (i.e., multiple) mobile stations 120_1 - 120_4 are accessing a communication medium. Stated another way, mobile stations 120_1 - 120_4 are communicating through a time division multiple access (TDMA) methodology. This TDMA methodology is illustrated in Figs. 10-12 for both uplinks and downlinks.

Therefore, Applicant's original disclosure provides adequate support for the previously claimed features of TDMA uplinks and downlinks.

Claims 1-5, 7, 9-16, 18-25, 27, 29, and 30 were rejected, under 35 USC §102(b), as being anticipated by Quick, Jr. (US 5,673,259). Claims 6, 8, 16, 18, 26, and 28 were rejected, under 35 USC §103(a), as being unpatentable over Quick in view of TIA/EIA/IS-95-A. To the extent these rejections may be deemed applicable to new claims 32-38, Applicant respectfully traverses these rejections.

Claim 32 recites:

*A communication method, comprising:
transmitting, during one of a plurality of offset periods, a channel access request that is encoded by a first scrambling code;
receiving a channel grant that identifies the first scrambling code; and
selecting a second scrambling code for use in communicating information over the granted channel based on the particular one of the plurality of offset periods used to communicate the channel access request.*

The portions of Quick and TIA/EIA/IS-95-A cited in the Office Action fail to suggest: (1) receiving a channel grant that identifies a first scrambling code used to encode a transmitted channel access request and (2) selecting a second scrambling code for use in communicating information over the granted channel

based on the particular one of the plurality of offset periods used to communicate the channel access request.

The Office Action cites col. 13, lines 7-32, of Quick for the disclosure of selecting a scrambling code (Office Action page 4, penultimate paragraph). In this portion of the reference, Quick discloses that a Packet/Paging Channel is scrambled using a Packet/Paging Channel Long Code mask 400, which is illustrated by Fig. 4 (Quick col. 13, lines 7-9). The Long Code mask 400 contains 42 bits (bits 0 through 41) (col. 13, lines 10-11). A first portion 402 of the Long Code mask 400 is nine bits long (i.e., bits 0-8) and constitutes a Pilot Pseudo-Noise (Pilot_PN) sequence offset index for the forward link CDMA channel (col. 13, lines 11-15). The Pilot PN sequence offset index is as defined in TIA/EIA/IS-95 §7.1.3.2.1 (col. 13, lines 15-16). A second portion 404 of the Long Code mask 400 is 12 bits long (bits 9-20), each bit being a zero (col. 13, lines 16-18). A third portion 406 of the Long Code mask 400 is a Packet/Paging Channel number, which is three bits long (bits 21-23) and identifies the number of the specific Packet/Paging Channel, each of which is assigned a unique number (col. 13, lines 18-22). The Packet/Paging Channel Number is in the range from 1 to 7, corresponding to the Walsh Code 33-39 assigned to the Packet/Paging Channel (col. 13, lines 22-24). A fourth portion

408 is five bits long (bits 24-28), each bit being a zero (col. 13, lines 24-26). Finally, a fifth portion 410 of the Long Code mask 400 is 14 bits long (bits 29-41) (col. 13, lines 26-27). The 14 bits of the fifth portion 410 are selected to ensure that the same Long Code is not used for any other type of CDMA channel (col. 13, lines 27-29). The Long Code of the Packet/Paging Channel is selected arbitrarily to be different from those of ordinary Paging and Access Channels, and the specific value may be varied without affecting the present invention (col. 13, lines 29-32).

With regard to communicating a channel access request and communicating a channel access grant, Quick discloses in Fig. 13A that after initialization (S1302), the base station awaits a Packet Channel Request Message sent by a mobile station over the Access Channel (S1304) (col. 22, lines 22-25). When the base station receives such a message, it sends a Packet Channel Assignment Message over the Paging Channel (S1306) to the mobile station (col. 22, lines 25-28). The base station then enters the Idle State (S1308), in which it awaits a User ID request from the mobile station (col. 22, lines 28-30). Presumably, both the mobile and base stations are in the Idle State at this point waiting for a User ID request (col. 22, lines 30-32). Upon receiving a User ID Request Message from the mobile station on

the Access Channel (S1310), the base station examines the User ID list (S1312), looking for an idle searcher (col. 22, lines 32-35).

At this point, the base station begins searcher management procedures (col. 22, lines 36-37). If the base station receives a User ID Request Message from a mobile station when a searcher is idle (i.e., when the User ID list is "NOT EMPTY" in Step 1312), the searcher is assigned to the mobile station, a User ID for the mobile station is selected, and the base station sends a User ID Assignment Message to the mobile station on the Packet/Paging Channel (S1314) (col. 22, lines 37-44). The base station may verify the mobile station's identity and its permission to use packet data services prior to assigning a User ID (col. 22, lines 44-46). Upon sending the User ID to the mobile station, the base station management procedure enters the Active State 1316, and the searcher begins searching for transmissions from the mobile station encoded with its User Specific Long Code (col. 22, lines 46-50). If, however, the base station receives a User ID Request Message from the mobile station when no searcher is idle (i.e., when the User ID list is "EMPTY" in Step 1312), the base station places the mobile station on a Wait List (S1318) and sets the Wait List Flag to "FALSE" (col. 22, lines 50-55). The base station then enters the Wait

State (S1320), and both the mobile station and base station wait for an available User ID (col. 22, lines 55-57).

In summary, the cited portions of Quick provide no suggestion of (1) receiving a channel grant that identifies a first scrambling code used to encode a transmitted channel access request and (2) selecting a second scrambling code for use in communicating information over the granted channel based on the particular one of the plurality of offset periods used to communicate the channel access request.

The sections of TIA/EIA/IS-95-A cited in the Office Action disclose a Paging Channel Long Code Mask that is used to encode information communicated from a base station to a mobile station over a forward paging channel (TIA/EIA/IS-95-A, see §7.1.3.4.6 and Fig. 7.1.3.4.6-1). This Paging Channel Long Code Mask includes a Pilot PN sequence offset index (Pilot_PN) that identifies the forward paging channel (§7.1.3.2.1).

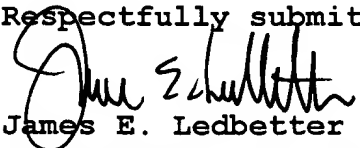
As is the case with Quick, the cited sections of TIA/EIA/IS-95-A provide no suggestion of receiving a channel grant that identifies a first scrambling code used to encode a transmitted channel access request and (2) selecting a second scrambling code for use in communicating information over the granted channel based on the particular one of the plurality of offset periods used to communicate the channel access request.

In accordance with the above discussion, Applicant submits that the combined teachings of Quick and TIA/EIA/IS-95-A do not suggest all of the features recited by claim 32. Base claim 36 recites similar features, but with respect to a communication system rather than a communication method. Therefore, allowance of claims 32 and 36 and all claims dependent therefrom is warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

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JEL/DWW/att

Respectfully submitted,

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